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NEW ECCENE FOSSILS FROM THE SOUTHERN STATES.

BY T. H. ALDRICH.

[Plate IV, fig. 6, OVULACTÆON ALDRICHI Wheeler, described in the June No., p. 13.—Ed.]

FISSURIDEA MAURYI n. sp. Pl. IV, figs. 1, 2.

Shell large, of medium height, narrowed at the anterior, and bent slightly downward; regularly oval on the posterior. Foramen rather large, somewhat keyhole-shaped; shell radiately sculptured, with about 32 strong primary ribs, generally with two smaller ribs between, at the anterior the ribs are nearly equal and closely set, the crossbar to the foramen deeply pitted, and the foramen itself triangular within.

The close-set lines of growth are very numerous; they break up the ribs into low nodules. Margin of shell strongly crenulate and flattened within. Longest diam. 31 mm.; breadth 24 mm.; height 11 mm.

Locality. Matthews Landing bed on Dale Branch, near Oak Hill, Ala. Named in honor of Miss Carlotta J. Maury, a co-worker in Tertiary palæontology. Figures by Prof. G. D. Harris.

ADEORBIS? NAUTILOIDES n. sp. Pl. IV, figs. 3, 4 and 5.

Shell very small, substance rather thin; whorls three, expanding rapidly. The body whorl separating and extending beyond the other whorls; surface smooth except near the aperture where a few growth lines become coarser; umbilicus small. The figure does not show the separation of the whorls well.

Longest diam. about 2 mm.

Locality. De Soto, Miss. Claibornian.

Remarks. This singular little species is doubtfully placed in Adeorbis. It might just as well be put in Valvata. It is hardly an embryonic shell, but in any event it is an interesting development wherever it really belongs.

ADEORBIS SOTOENSIS n. sp. Pl. IV, figs. 7, 8, 9.

Shell small, whorls five; spire pointed, smooth; whorls covered with spiral lines which are nearly obsolete just below the suture, growing more prominent on the body whorl as they approach the periphery. The effect is to make a broad, nearly smooth band on the whorls to the eye; under a glass this space shows exceedingly fine spirals. Body whorl strongly keeled, base smooth, umbilicus moderate. Aperture ovate. Diameter a little less than 2 mm.

Locality. De Soto, Miss., just above the Ostrea sellæformis bed. Claibornian.

LIMA HARRISIANA n. sp. Pl. IV, figs. 10, 11.

Shell oblong, slightly oblique, radially sculptured, covered with close-set lines slightly nodular; between them in the sunken spaces are fine dotted lines which die out towards the hinge line and umbo. The ribs are very numerous, near the umbo on one side they appear quite nodulous; ears very unequal, hinge nearly straight, but somewhat inclined to the central axis. In a young specimen the outer ribs appear to be nodulous and the inner margin denticulated.

Longest axis 17 mm.

Locality. Smithville, Texas. Claibornian.

Remarks. This species seems to be rather close to L. vicksburgiana Dall, but has many more ribs, over 50 in all.

Named in honor of Prof. G. D. Harris, who has kindly furnished the illustrations.

ERRATA.

In Bulletin of American Paleontology, No. 8, 1897, p. 10, Pl. II, fig. 5, I described a small shell as Actaeon cossmanni. This should have been written Acteonina (Crenilabium) cossmanni, nobis. A mistake was made in transcribing. It was however manifest as the writer placed it in the proper subgenus.

EULIMA COSSMANNI n. sp.

M. Cossmann has figured in "Notes Complementaires," Pl. I, fig. 34, page 27, 1893, as *Rissoina notata* Lea, a form that is not the species of Lea but a new form of *Eulima*, which may be called *E. cossmanni*. The shell described by Lea is also a *Eulima*.

The description and figure given by M. Cossmann are accurate for this new species. The true species of Lea also has a sinuous outer lip.

Dr. Paul Bartsch has examined specimens of the true Pasithea elegans H. C. Lea, and finds it to be a Bittium.

NOTES ON TRUNCILLA, WITH A KEY TO THE SPECIES.

BY BRYANT WALKER.

As the highest expression of Unione development, the *Truncilla* are of special interest to the systematic conchologist. Not only are the sexes sharply differentiated in all the species, but the species themselves are more clearly defined and less subject to variation than in any other of the recognized genera.

For this reason, the species are well adapted to the rigid limitations of a key, which in the more variable groups would, in many cases, be almost impracticable. But in genera such as this, where the specific lines can be drawn with sufficient exactness for such a purpose, the formation of a key, besides facilitating the identification of the species, is of great service in developing the peculiar distinguishing characters of the different species, and thus determining their proper position in a natural arrangement.

In attempting to make a key to the species of *Truncilla*, it almost immediately became obvious that, owing to the extreme differentiation of the sexes, which very often was not along analogous lines in species of the same group, a single key including both sexes was not feasible, and accordingly a separate key for each sex was made.

This condition also demonstrated that a consistent natural arrangement of the species would have to be based primarily on the variations of one of the sexes.

In view of the fact that the most recent classification of the *Unionida* is based primarily on the modifications of the gill of the